

REMARKS

All of the claims submitted for examination in this application have been rejected on two substantive grounds. Applicant has amended his claims and respectfully submits that all of the claims currently in this application are patentable over the rejection of record.

The first substantive ground of rejection is directed to Claims 1-6 and 8-20 as being anticipated, under 35 U.S.C. §102(b), by U.S. Patent 4,671,854 to Ishikawa et al. The Official Action avers that Ishikawa et al. teaches a method of preparing a printed circuit board with solder plated circuit and through-holes, using a specifically prepared photoresist material and a combination of exposure, development, solder plating and etching means.

The Official Action focuses on Example 2 of Ishikawa et al. wherein a photocuring type photosensitive resin composition is prepared by combining 100 parts of a resinous binder of a copolymer of methacrylic acid: styrene: an unsaturated compound; 1 part of a photoinitiator; and 3 parts of sodium ethylenediamine tetraacetate. The Official Action submits that Ishikawa et al. teaches that sodium ethylenediamine tetraacetate and ethylenediamine tetraacetic acid are equivalent, presumably because chelating agents within the scope of the Ishikawa et al. disclosure includes ethylenediamine tetraacetic acid and its salts. Insofar as the Official Action argues that 3 parts of the aforementioned tetraacetate represents 3% by weight, based on the weight of the resinous binder, the photoresist composition claimed in the present application is deemed anticipated by the Ishikawa et al. disclosure.

Applicant's amendment to independent Claims 1, 12 and 18 make moot the rejection of record. Each of these claims have been amended to limit the non-polymerizable

organic acid to a Markush group of acids clearly distinct and different from the acids within the contemplation of the Ishikawa et al. disclosure.

As stated in the Official Action, the Ishikawa et al. disclosure is relied upon for its teaching of ethylenediamine tetraacetic acid. None of the members of the Markush group of amended Claims 1, 12 and 18 include that acid or either of the other two acids mentioned in Ishikawa et al.

The acids within the scope of Ishikawa et al. are the chelating agents, as set forth at Column 4, lines 28-45. These agents, although acids, are utilized for their chelating, rather than their acid, properties. It is emphasized that none of the compounds set forth as being within the scope of the Ishikawa et al. invention are acetic acid. This is surprising given the number of the Ishikawa et al. chelating agent acids that are acetic acid derivatives. It is apparent that acetic acid, although a member of the Markush group of independent Claims 1, 12 and 18, is outside the scope of the Ishikawa et al. disclosure. Clearly, none of the other Markush group members of Claims 1, 12 and 18 are mentioned or suggested by Ishikawa et al. As such, it is apparent that the photoresist composition of Claim 1, and its dependent claims, Claims 2 and 5-11, the method of Claims 12, 13, 16 and 17, and the manufacturing method of Claims 18-20 are novel over the Ishikawa et al disclosure insofar as an anticipating rejection must be supported by a reference which discloses each and every element of the claim. Clearly, the critical non-polymerizable organic acid of the photoresist composition of the present application is novel over the teaching of Ishikawa et al.

It is emphasized that the amendments to independent Claims 1, 12 and 18 are fully supported by the originally filed specification. Attention is directed to the specification at Page 9, lines 6-18, wherein each of the Markush group acid members are set forth. It is also

noted that the amendment to Claim 2 is also fully supported by the aforementioned specification disclosure. Claim 5, which has been similarly amended to be properly dependent from amended Claims 1 and 2, is also supported by the specification.

The same amendment made to Claim 1 has been made to Claim 12. Similarly, Claim 13 has been amended to conform to the amendment to Claim 2. Likewise, the amendment to Claim 16 is equivalent to the amendment of Claim 5.

In a similar fashion, Claims 19 and 20 have been amended analogously to the amendments of Claims 2 and 5.

The aforementioned amendments make necessary the cancellation of Claims 3, 4, 14 and 15.

Turning to the second substantive ground of rejection, Claim 7 stands rejected, under 35 U.S.C. §103(a), as being unpatentable over Ishikawa et al. in view of U.S. Patent No. 6,140,025 to Imai et al.

The Official Action implicitly admits that none of the Markush group photoactive components within the scope of Claim 7 are disclosed by Ishikawa et al. To overcome this critical omission the Official Action applies Imai et al. for its disclosure of propiophenones as photoreaction initiators. It is noted, however, that the specific compounds recited as being within the scope of the Imai et al. photoinitiators does not include 2-hydroxy-2-methyl propiophenone, the compound utilized in Example 2 of Ishikawa et al. This is especially important since the propiophenones compounds recited in Imai et al. as being photoinitiators includes a whole host of propiophenone compounds.

It is emphasized that the patentability of Claim 7 is equally predicated upon the patentability of Claim 1, from which Claim 7 depends. That is, Claim 7 is limited to a class of

organic acids which predicate patentability over the combined teaching of Ishikawa et al. and Imai et al. As stated above, the criticality of the non-polymerizable acids within the scope of the amended Markush group of Claim 1 emphasizes the patentability of thus amended Claim 7.

The above remarks establish the patentability of the claims currently in this application over the two substantive grounds of rejection imposed in the outstanding Official Action. Reconsideration and removal of these grounds of rejection is therefore deemed appropriate. Such action is respectfully urged.

The above amendments and remarks establish the patentable nature currently is this application. Notice of Allowance and passage to issuance of these claims, Claims 1, 2, 5-13 and 16-20, is therefore respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marvin Bressler", with a long horizontal flourish extending to the right.

Marvin Bressler
Registration No. 25,132
Attorney for Applicant

SCULLY, SCOTT, MURPHY & PRESSER, P.C.
400 Garden City Plaza – Suite 300
Garden City, NY 11530
(516) 742-4343

MB:ahs